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October 17, 2018

By Electronic Filing

Marlene H. Dortch, Secretary Federal Communications Commission 445 12th Street SW Washington, DC 20554

Re: International Bureau Seeks Comment on Recommendations Approved by World Radiocommunication Conference Advisory Committee, IB Docket No. 16-185, WAC/066

Dear Ms. Dortch:

Broadcom Inc. is a diversified global semiconductor company. We are a leading designer, developer, and supplier of a broad range of semiconductor connectivity solutions that serve the wired infrastructure, wireless communications, enterprise storage, and industrial markets. Because of our global operations, we are deeply interested in the preparations for the upcoming World Radiocommunications Conference (WRC). The United States has been a leader in these conferences in advancing forward-looking, investment-producing, and technically sound spectrum policies. The U.S. was the first country in the world to identify frequencies for wireless telephony, and later to adopt rules permitting unlicensed technologies. Through its work at past WRCs the U.S. has spurred technical and regulatory progress around the world by championing these FCC decisions. We congratulate the FCC for the central role it has played in leading the world on spectrum policy.

We write today on the 5150-5250 MHz band. This band plays an important role in supporting broadband access in the U.S. through Wi-Fi. Demand for wireless data over Wi-Fi is skyrocketing and studies have made it clear that the U.S. lacks adequate unlicensed frequency bands to keep up with this demand, much less to support the capacity-hungry and latency-sensitive innovations that are fast approaching. If the country does not find additional unlicensed bands, it risks undermining the exceptional economic contributions that these technologies deliver.

As the FCC and the Administration work hard to find additional unlicensed bands, they should not call into question recent FCC work to convert the 5150-5250 MHz band from an underproductive band into an important home for Wi-Fi. For that reason, Broadcom supports View A of the WRC Advisory Committee on Agenda Item 1.16 (Document WAC/066). The vast majority of parties participating in the WRC preparatory work on this Agenda Item support View A—Apple Inc., Cisco Systems, Comcast, Inc., Facebook, Inc., the Global Mobile Suppliers Association, Intel Corporation, Microsoft Corporation, NCTA, and the Wi-Fi Alliance. These companies and trade associations support View A because it recommends that the FCC reiterate its existing technical rules for the 5150-5250 MHz band. These rules impose significant protections for the band's one active incumbent user, but have done so in a careful manner that has allowed deployment of viable RLAN operations. Before the recent FCC proceeding that created today's rules, the band was notably underutilized, with a large swath of spectrum essentially reserved for a single company with a small

Ms. Marlene H. Dortch October 17, 2018 Page 2 of 2

number of customers. This was inconsistent with the U.S. policy of enhancing the productivity of scarce spectrum resources, and unnecessary because of the possibility of sharing mechanisms.

Globalstar, the one active incumbent in the entire band, and a second satellite company called Omnispace, were the only companies to oppose View A in the preparatory process. Their opposition is based on a faulty technical study that is inconsistent with the technical study submitted by the U.S. in its contribution to Working Party 5A as it considered studies related to RLANs. This study purports to show measurements of an increase in the noise floor in the band. But it fails in several important ways. First, the measurements do not show any harmful interference to Globalstar—only guesses about the future. Second, Globalstar does not demonstrate that the supposed additional energy it detected is related to RLAN operations. Third, the study cannot demonstrate that noise levels will increase in the future to a level where Globalstar will experience harmful interference. The Wi-Fi Alliance conducted a detailed analysis of the Globalstar paper and has contributed a thorough refutation on the record before the FCC and in the WRC preparatory process, and we recommend it for additional details on the methodological and logical problems with the Globalstar paper.

The FCC's existing rules can serve as an important guide for other countries considering their spectrum policies. Advancing this goal at the WRC would improve international harmonization, assisting Broadcom and other U.S. companies as we work to expand wireless broadband around the world. We therefore request that the FCC support View A in interagency discussions as the country arrives at its final WRC positions.

Sincerely,

Chris Szymanski

Chris Szymanski Director, Product Marketing & Government Affairs Broadcom Inc.

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¹ Sharing and Compatibility Study Between WAS/RLAN Applications and NGSO Systems in the Mobile Satellite Service with FSS Feeder Links Operating in the 5091-5250 MHz Band, United States of America Contribution, Doc. No. 5A/727-E (May 9, 2018).